NE (Page 26, line 15) Each dot on the carrier 21 is an oligonucleotide selected from Tables 1 to 36. For example, an oligonucleotide on the carrier 21 could be selected from one of the sequences numbered SEQ ID NO: 1 to SEQ ID NO: 24 (shown in Table 1) for identifying the subtype 11 of human papilloma viruses (HPV 11).

NE (Page 28, line 5) 2.1 Glutaldehyde-3-phosphodehydrogenase gene is used as the internal control of the polymerase chain reactions according to the following steps 2.1.1 to 2.1.3.

2.1.1 Mixing the following components:

| Reagent | Stock | amount | Final concentration |
|---|---|---|---|
| Sterile $H_2O$ | | 2.6 | |
| 10X *Taq* Buffer | | 0.5 | 1X *Taq* Buffer |
| dNTP | 2.5 mM | 0.4 | 200 μM |
| Template | | 1 | |
| GAP241-5[1)] primer | 10 pmol/μl | 0.2 | 0.4 pmol/μl |
| GAP241-3[2)] primer | 10 pmol/μl | 0.2 | 0.4 pmol/μl |
| ProTaq (PROTECH) | 5 U/μl | 0.1 | 0.1 U/μl |
| Total volume ( μl ) | | 5 | |

1) Gap21-5 (SEQ ID NO: 648): CCACCAACTGCTTAGCACCCC

2) Gap21-3 (SEQ ID NO: 649): TGCAGCGTACTCCCCACATCA

3) The proper amount of mineral oil is added to prevent the evaporation.

NE (Page 28, line 11) 2.1.2 The polymerase chain reaction is performed according to the following programs.

| Program 1 | Program 2 | Program 3 |
|---|---|---|

| | | |
|---|---|---|
| | 94°C , 15 seconds | |
| 94°C , | 57°C , | 72°C , |
| 3 minutes | 1 minute | 5 minutes |
| | 72°C , 30 seconds | |
| | 40 cycles | |

(Page 29, line 8) 2.2.2 The polymerase chain reaction is performed according to the following programs.

| Program 1 | Program 2 | Program 3 |
|---|---|---|
| | 94°C , 15 seconds | |
| 94°C , | 45°C , | 72°C , |
| 3 minutes | 1 minute | 5 minutes |
| | 72°C , | |
| | 1.5 minutes | |
| | 45 cycles | |

NE

(Page 32, line 22) The subtype of human papilloma viruses identified by each dot of the dot array 32 is illustrated in Fig. 3(b). SC (system control) presents the PCR product amplified from any subtype of human papilloma viruses and biotin-contained primer. NC (negative control) presents the plants DNA fragment irrelevant to HPV. IN (internal control) presents the sequence 5'-gcccagactgtgggtggcag-3' (SEQ ID NO: 650) of the housekeeping gene, Glyceraldehyde-3-Phosphate Dehydrogenase (GAP-DH).